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200 Arch St.

An

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on

Icterus or Jaundice

For the degree of Doctor of medicine  
in the

University of Pennsylvania

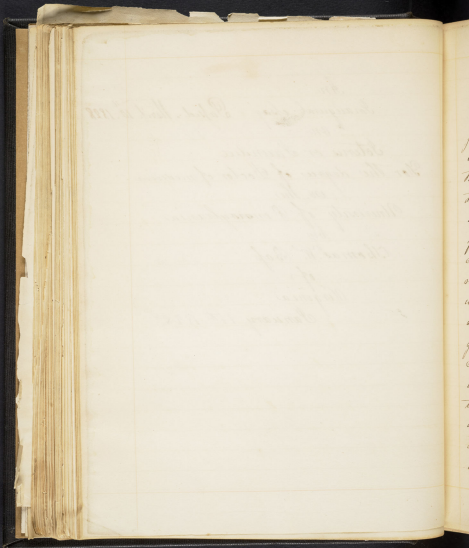
by

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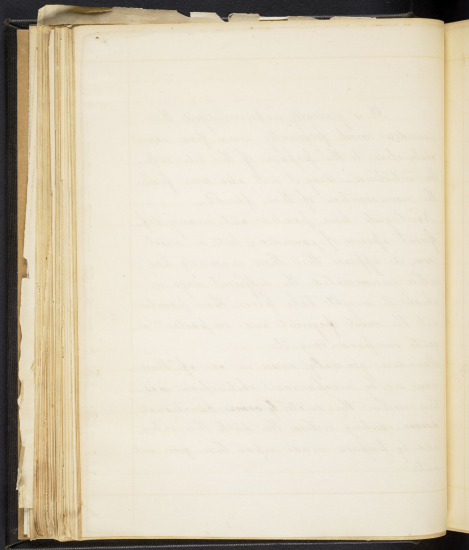
January 16<sup>th</sup> 1828



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It is generally acknowledged that jaundice most frequently arises from some obstruction to the passage of the bile into the intestines - May it not also arise from the non-secretion of that fluid?

Nasologists have pointed out many different species of jaundice, but, in most cases, it appears that their ingenuity has rather enumerated the different ways in which it might take place, than pointed out the most frequent and important agents in producing it.

Jaundice generally arises in one of three ways, viz. by mechanical obstruction existing within the ducts, by some functional disease existing within the ducts themselves, and by pressure made upon them from without.

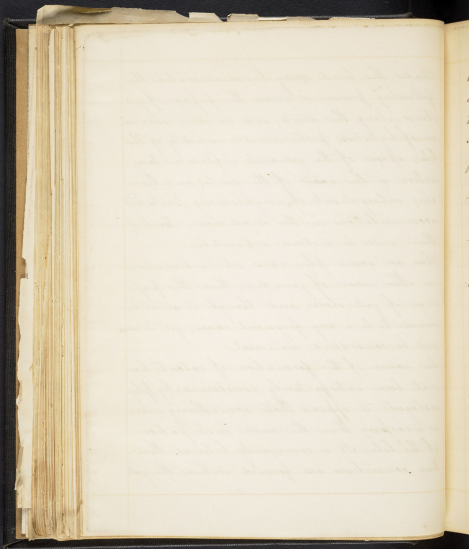




Under this head may be enumerated the following presumed causes, the passage of gall-stones along the ducts, and in some cases (see of hydatids) preternatural viscosity of the bile; spasm of the gall-duct, inflammatory action in the coats of the ducts, and liver abscess; enlargement of neighbouring parts, and accumulations in the duodenum. Each of these will be noticed separately.

There are some physicians who acknowledge no other cause of jaundice, than the passage of gall-stones, and though it must be allowed to be a very frequent cause, yet it cannot be considered universal.

The cause of the formation of calculi has not been satisfactorily ascertained by physiologists. It appears that something more is necessary than the mere inspissation of the bile. It is commonly believed that these concretions are formed within the gall-

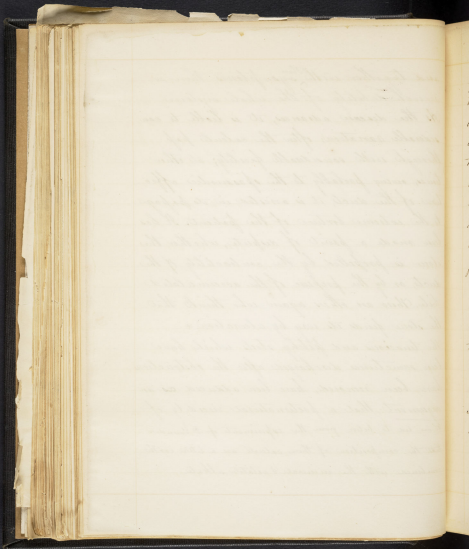


bladder, though Dr Thomas speaks of their be-  
 ing found in the fori bilari, and parenchym-  
 atous and cellular substance of the liver.  
 A sedentary life seems particularly to predis-  
 pose to them; and women are much more  
 liable to be affected, than men. When impac-  
 ted within the gall bladder, the calculi are  
 of no inconvenience; but when, from any cause,  
 they pass into the ducts, they occasion se-  
 vere pain, and always jaundice, for a while.  
 The pain is generally referred to the pit of the  
 stomach, and is often more acute, than  
 that produced by inflammation of the most  
 sensible parts. The patient cannot bear the  
 recumbent posture, but sits up with the  
 body inclined forward. The pulse is <sup>ventr.</sup> ~~some-~~  
 accelerated during a severe attack, though  
 it is often not more frequent than in health.  
 Together with these symptoms, the stomach  
 is affected with nausea and vomiting

and the other side of the mountain  
the other side of the mountain

and together with <sup>these</sup> symptoms there is much debility of the whole system. As the disease advances, it is liable to considerable variations, often the calculi pass through with considerable facility; at other times, owing probably to the spasmodic affection of the duct, it is arrested in its passage to the extreme torture of the patient. It has been made a point of dispute, whether the stone is propelled by the contractility of the duct, or by the pressure of the accumulated bile. There are others again who think that the stone finds its way by ulceration. The tenacious and pitchy stools which have been sometimes discharged after the obstruction has been removed, have been adduced as an argument that a postmortalous viscosity of

\* We are led to believe from the experiments of P. Linnæus that the composition of these calculi are a little earth combined with the mineral & volatile alkali.



of the bile is often the cause, whether such is ever  
the cause, I think very dubious. It is likely that  
in some sluggish states of the stomach and bow-  
els, it might exist in a slight degree. Respecting  
the cause of such morbid change of the bile, ve-  
ry little is known. Among the causes which have  
been thought to produce it, are the intempe-  
rate use of ardent spirits, indolent habits &c.  
The autumnal fumes of warm climates, also ap-  
pear somewhat instrumental in producing  
such a state of the secretions.

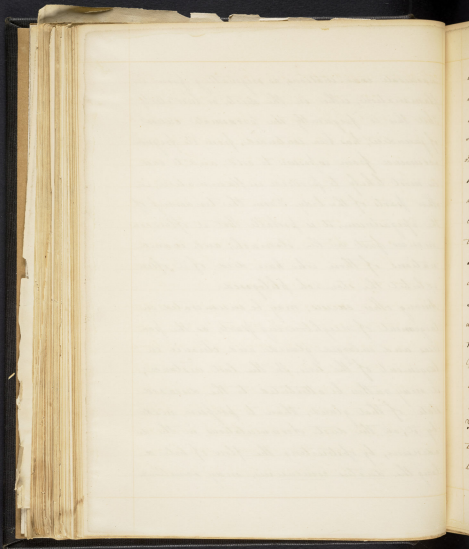
Post-mortem examinations not revealing any ob-  
struction to the passage of bile, has been adduced  
to prove that jaundice was produced by spasm  
of the ducts; & this has been thought to be strength-  
ened by the occurrence of hysteria, with it.  
If such is ever the case, I think it would on-  
ly be temporarily so; I should not be consid-  
ered as a disease of much moment.  
Such a state might be supposed to exist, from



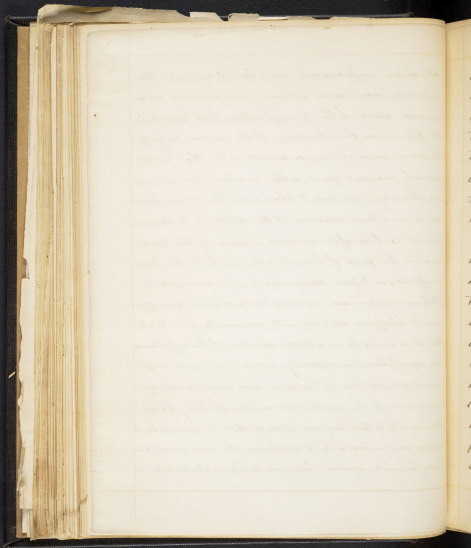


inaccurate examinations, as originating from inflammation, either in the ducts, or liver itself. That this is frequently the proximate cause of jaundice, has been contended, from its frequent occurrence from exposure to cold, and to causes most likely to produce inflammation, in other parts of the body. From the tenderness of the epigastrium, it is probable that it often commences first in the stomach; and examinations of those who have died of it, often exhibit the stomach phlogosed.

Among other causes, may be enumerated enlargement of neighbouring parts, as the pancreas and salivary glands, and chronic enlargement of the liver. In the last instance, it may rather be attributed to the diseased state of that gland, than to pressure made by it, on the duct. Accumulations in the duodenum, by obstructing the flow of bile along the ductus communis, may sometimes

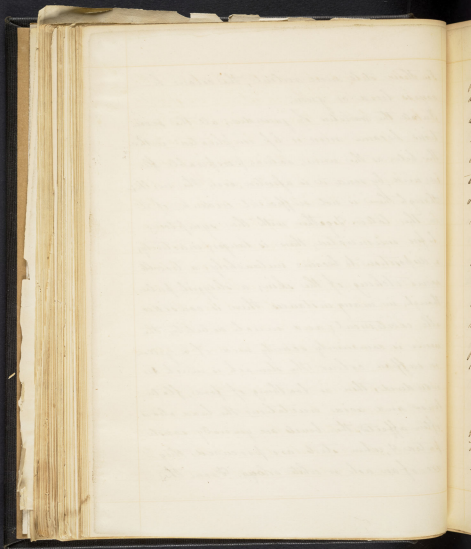


not as an impediment similar to calculus. The intimate connection between jaundice and certain diseased states of the brain, has been well ascertained. It often arises from irritation of the meninges, as grief. In some cases of liver, as scirrhus is it, that we can scarcely account for it, either by absorption, or in any other way. Such cases, I believe, are produced by an altered secretion of the capillaries. In inflammation of the liver often succeeds injuries of the head: and in the fever of hot climates, in which the brain is affected, an hepatic derangement is apt to occur with it. Nothing is determined regarding the proximate cause of jaundice. I believe, contends, with considerable probability, that it is owing to an altered secretion of the capillaries. The symptoms necessarily present in jaundice, are discolouration of the skin and urine, and an absence of the natural colour of the face. The intensity of them vary very much; so that, in some cases, the tunica conjunctiva only is discoloured. In cases of more or less, the whole system becomes deeply imbricated with it.



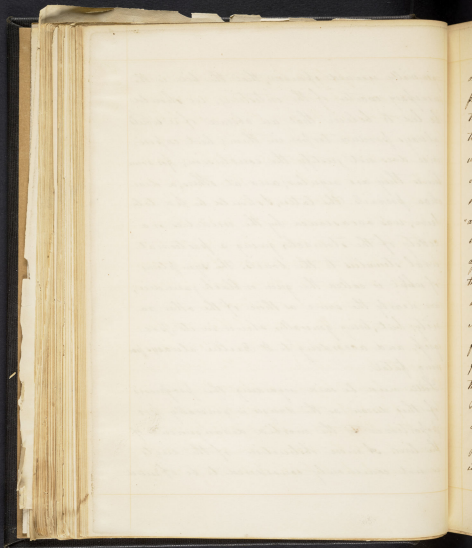
In those still more violent, the colour becomes livid or green.

In all the varieties of jaundice, all the secretions become more or less implicated with the bile, as the urine, saliva, & copiousable fluids; and, by some it is asserted, even the milk; though there is not sufficient evidence of it in the latter. Together with the symptoms before enumerated, there is languor, inactivity, a disposition to become melancholy; a troublesome itching of the skin, a sluggish pulse though, in many instances there is considerable excitement; and much debility, the urine is commonly scanty and of a yellow or saffron colour. The stomach is much disordered; there is loathing of food, flatulency and acid eructations. The liver also is often affected, the bowels are generally constipated & when stools are procured, they are of an ash or white colour. From the



generally received opinion, that the bile is the  
necessary exciter of the intestines, we should  
be led to believe that an absence of it would  
always produce torpor in them; but *ex post*,  
once does not justify the conclusion, for some-  
times they are regular; and at others, a dys-  
shoa prevails. The latter, I should be led to be-  
lieve, was occasioned by the acridities or a-  
cidity of the stomach, giving a posttermat-  
ural stimulus to the bowels. The symptoms  
of *whit* is called the green or black jaundice,  
are nearly the same as those of the other va-  
riety; but, being generally slower in its pro-  
gress, and according to Dr Baillie always pro-  
ving fatal.

Little need be said regarding the prognosis  
of this disease, as the danger is generally pro-  
portioned to the morbid derangement of  
the liver. A mere obstruction of the ducts  
is not commonly considered to be of much

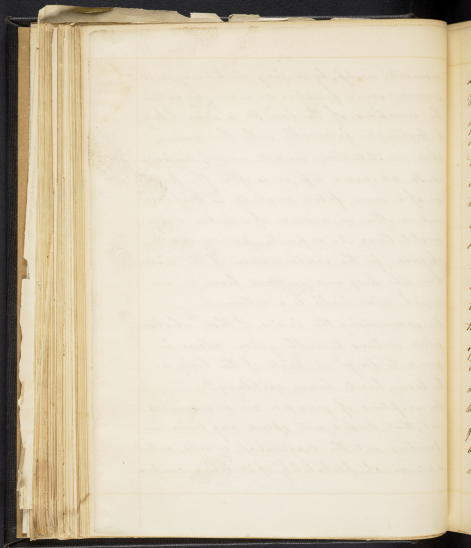




moment, unless, by its long continuance, it produce some functional derangement in the secretions of the liver. It is more likely to terminate favourably with the young, whose constitutions are not much impaired. In advanced life, it is often the precursor of a more fatal malady as dropsy &c. and is often an evidence of a broken down constitution. No definite period can be assigned for the continuance of the disease. Those who have once suffered from it are much more liable to a return.

In examining the bodies of those who have fallen victims to it, the yellow colour is found to tinge all parts of the body, as the brain, heart, lungs, cartilages &c.

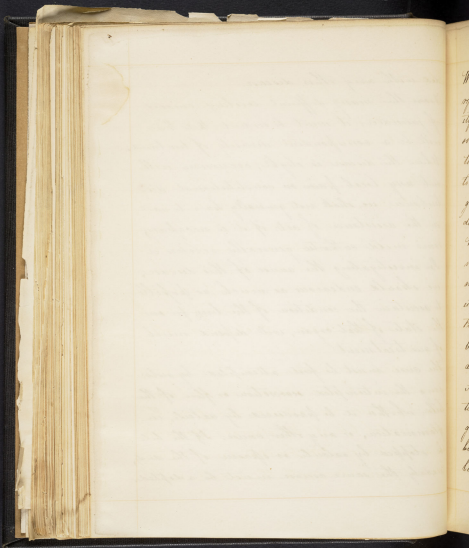
The symptoms of jaundice are so unequivocal, that I need not spend any time in pointing out the diagnostic marks, as there is not much probability of its being confun-



ded with any other disease.

From the many different existing causes of jaundice, it must be evident that there will be a correspondent diversity of treatment. Where the disease is slight, accompanying with out any local pain or constitutional disturbances, we shall not generally have to call in the assistance of art; if it is necessary, some mild cathartic generally relieves it. In investigating the cause of this disease, we should endeavour as much as possible to ascertain the condition of the liver, for as the state of that organ, will depend much of our treatment.

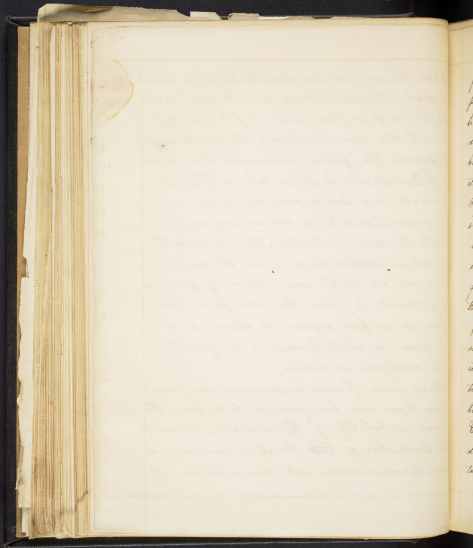
The cure must be first attempted by restoring the interrupted secretion or flow of the bile, whether it be produced by calculi, inflammation, or any other cause. If the bile be stopped by calculi or spasm of the duct, nearly the same course must be adopted.



When the irritation, excited by the stony, is very great, & the pain intense, from the great liability there is for inflammation to follow, and also with the view of relaxing the vessels, and to prevent the febrile excitement that is apt to follow, it will be proper take away <sup>blood</sup>, both generally and locally sometimes, even a deliquium. Stimulating also are very useful.

With the same intention, the warm bath must be resorted to, in which the patient may remain until some degree of fainting is produced. To relieve the severe pain, when there is no fever, a grain of opium might be given, or, what perhaps is preferable an anodyne enema.

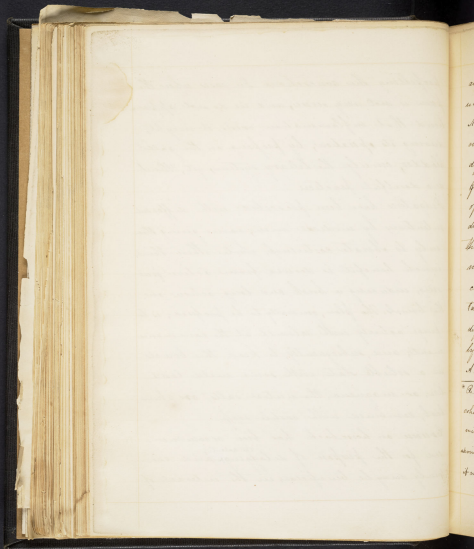
Small doses of some antispasmodic preparations, have also been advised; but, from the great irritability of the stomach, they would be productive of little benefit. Vomiting has been recommended with the intention of



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propelling the secretions. In cases where the  
pain is not very severe, and we do not apprehend  
that inflammation exists, it might, during its operation,  
by pressing on the gastric  
blood, enlarge the biliary system, yet, I think  
it a doubtful practice.

Blisters have been performed with different  
intentions by medical men, some giving them  
only to obviate costiveness; while others think  
much benefit is derived from action pro-  
ceeding, inducing a brisk and long action on  
the bowels. The plan, generally to be pursued, is to  
prunge actively with calomel at the commencing  
moment, and, subsequently, to keep the bowels  
in a soluble state with some mild laxa-  
tive, as magnesia, the neutral salt, or other  
herb, combined with castile soap.

Coussin on horse back has been recommen-  
ded for the purpose of detension <sup>the intestines;</sup> and cer-  
tainly may be beneficial in the interval of





an attack. Electricity has also been tried to stimulate the ducts.

Many experiments have been made to find out some medicines that had the power of dissolving biliary calculi, or of preventing their formation; by altering the morbid conditions of the liver. Any thing to answer the first indication, has of late been deservedly neglected, though there is little doubt, but that much may be done to answer the second indication. The nitric acid, Alkalies, soap and turpentine, have all been recommended by different writers. The following mixture is highly so commended by Dr Chapman.

A mixture of sulphuric ether and turpentine was

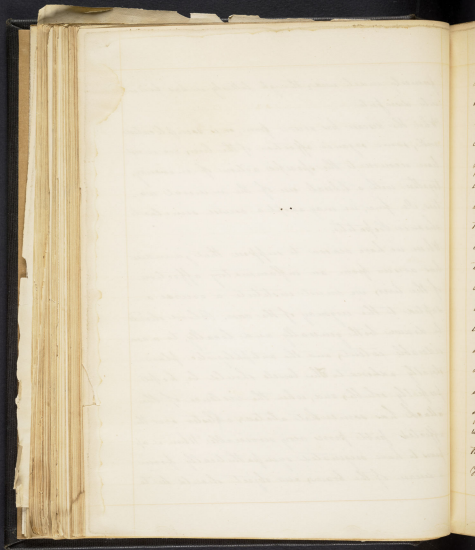
\* R. carbonas Pilae, ℥j. — Turp. Virgin. — Gum. Arab. aa. ℥j. p. oil  
 oil, diluted, to be stronger, so that the ingredients may be well  
 mixed and dissolved, which will require several days. The dose is a half  
 above glass full, to be taken for three or six fine mornings, fasting and  
 if not relieved, omit it for one day, and then return to the same dose.



formerly much used, though lately it has fallen into disrepute.

When the disease has arisen from, or is accompanied with, some organic affection of the liver, we must have recourse to the specific action of mercury, together with a liberal use of the mineral waters. In fine, we may adopt a course similar to chronic hepatitis.

When we have reason to suppose that jaundice has arisen from an inflammatory affection of the liver, we must institute a course adapted to the urgency of the case. Blood should be drawn both generally and locally, to a considerable extent, and the antiphlogistic plan strictly adhered to. The bowels should be kept perfectly soluble and, when the violence of the attack has somewhat abated, blisters over the affected part prove very serviceable. When it appears to have originated sympathetically from a disease of the brain, our object should be to

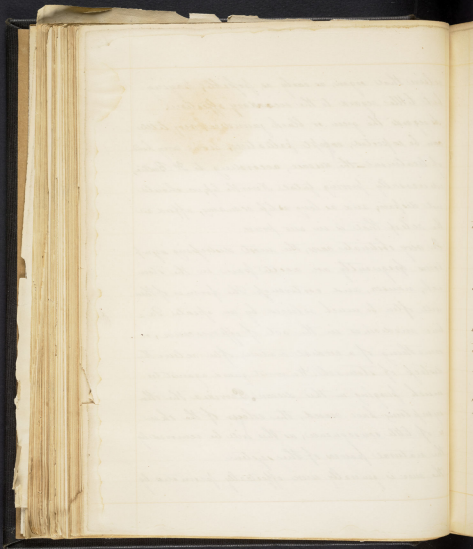


relieve that organ, as early as possible, paying but little regard to the secondary affection.

As regards the green or black jaundices very little can be expected, except palliatives, from any kind of treatment—the disease, according to St. Billie, universally proving fatal. Nevertheless, we should not despair, and as long as life remains, afford all the relief that is in our power.

In very obstinate cases, the most distressing symptoms frequently are acute pain in the stomach, nausea, and costiveness. The former of these will often be much relieved by an opiate. Purgative medicines in the sort of effluvia cases, or something of a cordial nature, often relieve the distress of stomach. We must guard against too much purging in this disease. Provided the other symptoms have ceased, the ecchymosis of the skin is of little consequence, as this will be removed by the natural power of the system.

The cure is generally more effectually promoted by



a well regulated regimen, consisting of the light  
 farinaceous articles, together with the moderate  
 use of the vegetable bitters or martial preparations.  
 Moderate exercise, especially on horse back, will  
 also be of considerable advantage.

A predisposition to jaundice being once established,  
 a recurrence to it is very apt to take place: so that  
 the patient should studiously avoid all its exciting  
 causes as inappropriate diet or clothing, exposure to  
 cold, exertion, immoderate exercise and violent pas-  
 sions of the mind, &c.

With the assurance that the humble efforts of an  
 inexperienced writer, will be regarded with lenity by  
 those who are to be my judges, in accordance  
 with the requests of our University; I must accept  
 fully submit this imperfect copy, as my in-  
 adequate apology.

